

CLAIMS

1. An electronic access control device, comprising:

5 (a) a movable locking member;

(b) a latch member movable between an open position and a locked position, said latch member in said locked position interfering with movement of said locking member;

10 (c) an electrical unit operable to control said latch member and connected to a power supply;

(d) a movement detector that generates a first signal in response to movement of said locking member;

15 (e) a key detector that generates a second signal in response to detecting a key; and

(f) said power supply directing current in said electrical unit in one direction to increase resistance to movement of said locking member in response to said first signal, and said power supply directing current in said electrical unit in an opposite direction to decrease resistance to movement of said locking member in response to said second signal.

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3. The electronic access control device of claim 1 wherein said electrical unit is an electric motor.

3. The electronic access control device of claim 1 wherein said electrical unit is a solenoid.

35 24. The electronic access control device of claim 1, further including a releasing mechanism to move said latch member to said open position when current

flows in said electrical unit in response to said second signal.

5 ~~2~~ ³ 5. The electronic access control device of claim ~~1~~ wherein said releasing mechanism is a spring.

10 ~~4~~ ⁴ 6. The electronic access control device of claim 1, further including an anti-releasing mechanism that urges said latch member toward said locked position.

15 ~~4~~ ⁴ 7. The electronic access control device of claim ~~6~~ wherein said anti-releasing mechanism is a spring.

20 ~~4~~ ⁶ 8. The electronic access control device of claim ~~5~~, further including a releasing mechanism to move said latch member to said open position when current flows in said electrical unit in response to said second signal.

25 ~~7~~ ⁷ 9. The electronic access control device of claim 1 wherein said locking member, said latch member, said electrical unit, and said power supply are housed in an enclosure comprised of at least two parts, said two parts being matingly engageable with one another.

30 ~~Sub C5~~ 10. The electronic access control device of claim 1, further comprising a key management system wherein said first key detected by said key detector becomes a master key.

35 ~~8~~ ⁹ 11. The electronic access control device of claim ~~10~~ wherein said key management system stores a plurality of authorized key codes, and said key management system adds another key code to said authorized key codes in response to receiving from said key detector a signal corresponding to said master key and another signal corresponding to another key.

11. An electronic access control device, comprising:

- (a) a movable locking member;
- (b) a locking mechanism operable to control said locking member;
- (c) a movement detector that generates a first condition in response to movement of said locking member;
- (d) a key detector that generates a second condition in response to detecting a key; and
- (e) said locking mechanism increasing resistance to movement of said locking member in response to said first condition, and said locking mechanism decreasing resistance to movement of said locking member in response to said second condition.

20 12. The electronic access control device of claim 11, further including an anti-releasing mechanism operable with said locking mechanism to increase resistance to movement of said locking member.

25 13. The electronic access control device of claim 12 wherein said locking mechanism includes a solenoid.

30 14. The electronic access control device of claim 12 wherein said locking mechanism includes an electric motor.

35 15. The electronic access control device of claim 12 wherein said locking member and said locking mechanism are housed in an enclosure comprised of at least two parts, said two parts being matingly engageable with one another.

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17. The electronic access control device of claim 12, further comprising a key management system wherein said first key detected by said key detector becomes a master key.

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18. The electronic access control device of claim 17 wherein said key management system stores a plurality of authorized key codes, and said key management system adds another key code to said authorized key codes in response to receiving from said key detector a signal corresponding to said master key and another signal corresponding to another key.

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19. An electronic access control device,

comprising:

- (a) a control mechanism regulated by a computer system;
- (b) a key detector that generates different key codes in response to detecting at least some keys;
- (c) said computer system capable of storing a plurality of authorized key codes, said computer system operable to regulate said control mechanism in response to one of said authorized key codes; and
- (d) said computer system storing a master key code in response to a first key code generated by said key detector, so that a first key detected by said key detector becomes a master key capable of controlling storage of said authorized key codes.

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20. The electronic access control device of claim 19 wherein said computer system comprises a processor and a memory device.

21. The electronic access control device of
claim 19 wherein said computer system comprises an
integrated unit having both a processor and a memory.

5 22. The electronic access control device of
claim 19 wherein said actuating mechanism includes a
locking mechanism.

10 23. The electronic access control device of
claim 19 wherein said actuating mechanism sounds an alarm
when said electronic access control device is accessed
without first receiving an authorized key code.

15 24. The electronic access control device of
claim 19 wherein said actuating mechanism prevents use of
an electrical device.

20 25. The electronic access control device of
claim 22 wherein said locking mechanism includes an
electrical unit and said computer system directs current
through said electric unit in one direction in response
to receiving an authorized key code, and directs current
through said electrical unit in an opposite direction in
response to receiving a signal from a movement detector
25 corresponding to movement of said locking mechanism.

30 26. The electronic access control device of
claim 19, wherein said control mechanism, said key
detector, and said computer system are housed in an
enclosure comprised of at least two parts, said two parts
being matingly engageable with one another.

35 27. The electronic access control device of
claim 19 wherein said computer system adds a new key code
to said plurality of authorized key codes in response to
receiving from said key detector a signal corresponding

100-200-300-400-500-600

to said master key and another signal corresponding to a new key.

28. The electronic access control device of
5 claim 19 wherein said computer system subtracts an old
key code from said plurality of authorized key codes in
response to receiving from said key detector a signal
corresponding to an old key and a signal corresponding to
said master key.

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29. An electronic access control device,
comprising:

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(a) an enclosure comprised of at least a base
member and a housing detachably matingly
engageable with one another, said
enclosure containing a locking mechanism
to control a locking member having
respective locked and open positions;

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(b) said base member having mounting members
that attach said base member to a surface;
and

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(c) a catch mechanism cooperating with said
housing and said base member that limits
relative movement therebetween when said
housing is matingly engaged with said base
member to form said enclosure and said
locking member is in a locked position.

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30. The electronic access control device of
claim 29, further including a strike unit, and said
enclosure defining one or more openings, each of said
openings of said enclosure facing at least one of the
surface and said strike unit when said locking member is
received by said strike unit.

31. The electronic access control device of claim 29 wherein said locking mechanism includes an electric unit.

5 32. The electronic access control device of claim 29 wherein said catch mechanism is a spring.

33. The electronic access control device of claim 29 wherein said locking member is arcuate.

10 34. The electronic access control device of claim 29 wherein said locking member in said locked position substantially surrounds a portion of said strike unit.

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